

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

VERSUS TECHNOLOGY, INC.,)	
)	
Plaintiff,)	
v.)	Civil Action No. 04-1231 (SLR)
)	
RADIANCE, INC.)	
)	
Defendant.)	

RADIANCE'S RESPONSE TO VERSUS' CLAIM CONSTRUCTION BRIEF

Josy W. Ingersoll (#1088)
Christian Douglas Wright (#3554)
Karen E. Keller (#4489)
YOUNG CONAWAY STARGATT &
TAYLOR, LLP
The Brandywine Building
1000 West Street, 17th Floor
P. O. Box 391
Wilmington, Delaware 19899-0391
(302) 571-6672
Attorneys for Radianse, Inc.

OF COUNSEL:

Sibley P. Reppert
William A. Scofield, Jr.
LAHIVE & COCKFIELD
28 State Street
Boston, MA 02109-1784
(617) 227-7400

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Versus misstates the general rules applicable to claim construction, and improperly disregards the context of the intrinsic record and the extrinsic evidence in its proposed constructions of specific claim terms.

Versus' first argument, that "the Court should not define terms that are already in simple terminology," finds no support in the law of patent claim construction. *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005), the leading Federal Circuit case on claim construction, elaborates that the prism through which to view claim terms is that of a person of ordinary skill in the art in question at the time of the invention. *Id.* at 1313. While the *Phillips* court observed that, "in some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words," the *Phillips* court did not hold that such words did not have to be construed. The very fact that Versus and Radianse disagree as to the proper construction of the specific limitations addressed in Versus' brief makes it clear that they need to be construed. It is meaningless to say that those terms are "in simple terminology" and, "as clear as the English language can make them."

As will be discussed below with respect to the specific claim elements that are identified and discussed by Versus in its brief, Versus violates the rules of claim construction set forth by the Federal Circuit by ignoring the patented invention as described in the specification and the file history, and in inventor testimony. Under *Phillips*, the specification is "the single best guide to the meaning of a disputed claim term." *Id.* at 1315. In cases after *Phillips*, the Federal Circuit has further articulated this standard. In *Nystrom v. Trex Co. Inc.*, 424 F.3d 1136, 1142 (Fed. Cir. 2005), the Federal Circuit reiterated that "the person of ordinary skill in the art views the claim

terms in light of the entire intrinsic record. Thus, the claims must be read in view of the specification of which they are a part.” [citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 969 (Fed. Cir. 1995) (*en banc*)]. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” In *Nystrom*, the Federal Circuit made it clear that the written description and prosecution history formed the context in which claim terms must be viewed. “[A]s explained in *Phillips*, *Nystrom* is not entitled to a claim divorced from the context of the written description and prosecution history What *Phillips* now counsels is that in the absence of something in the written description and/or prosecution history to provide explicit or implicit notice to the public – *i.e.*, those of ordinary skill in the art – that the inventor intended a disputed term to cover more than the ordinary and customary meaning revealed by the context of the intrinsic record, it is improper to read the term to encompass a broader definition simply because it may be found in a dictionary, treatise, or other extrinsic source.” *Id.* at 1145.

As will be seen from the following discussion of the specific claim terms in dispute, Versus disregards the “context of the intrinsic record,” as well as the extrinsic evidence consisting of inventor testimony.

A. THE ‘314 PATENT

1. “Light-Based Signal”(Claims 1, 9)

When read in the context of the intrinsic extrinsic record and the inventor’s testimony, it is apparent that, for purposes of the ‘314 patent, a “light-based signal” is a signal transmitted by means of infrared radiation. Versus fails to discuss the specification or the testimony of co-inventor Wayne Duncan, who agreed entirely with the construction proposed by Radianse. There is no support whatsoever in the specification for Versus’ construction, under which “the signal may include other constituents in addition to the light component.” The “Summary of the

Invention” plainly states, “This is an identification system employing infrared radiation for communication within the system. The communication means are a plurality of individually independent transmitters each issuing a distinctive signal in infrared radiation.” (‘134 Patent, col. 1, ln. 58-62) (emphasis added). The plain context of this patent is a system using infrared (IR).

The context of the intrinsic record makes it clear that the term “light-based signal” as used in the patent has no other meaning besides an IR signal. No other type of signal is disclosed or even mentioned in the specification. Inventor Wayne Duncan testified unequivocally that “the words light-based signal” meant “infrared transmission.” (Duncan Dep. at 26).

Versus’ claim differentiation argument is incorrect. Since the term “light-based signal” can only be interpreted to mean an infrared signal in the context of this patent, the doctrine of claim differentiation does not apply:

The concept of claim differentiation . . . states that claims should be presumed to cover different inventions. This means that an interpretation of a claim should be avoided if it would make the claim read like another one. Claim differentiation is a guide, not a rigid rule. If a claim will bear only one interpretation, similarity will have to be tolerated.

Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1538 (Fed. Cir. 1991) (quoting *Autogiro Co. of America v. United States*, 181 Ct. Cl. 55 384 F.2d 391, 404 (1967)).

In addition, the doctrine of claim differentiation does not usually apply to means-plus-function claims, such as claim 1 of the ‘314 patent. *Norgren Automotive, Inc. v. SMC Corporation of America*, 261 F. Supp. 2d 910, 918 (E.D. Mich. 2003). Rather, “claims that are written in the form authorized by section 112, paragraph 6 are by statute limited to the structure described in the specification and the equivalents of that structure.” *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1364 (Fed. Cir. 1998). The reason for this is that,

Simply stated, the judicially developed guide to claim interpretation known as “claim differentiation” cannot override the statute. [35 U.S.C. §112, ¶6]. A means-plus-function limitation is not made open-ended by the presence of another claim specifically claiming the disclosed structure which underlies the means clause or an equivalent of that structure.

Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1538 (Fed. Cir. 1991).

In *Laitram*, the argument was made that an interpretation of a means-plus-function claim which read the structural limitation of a “cross-member” into the claim was impermissible despite section 112, paragraph 6, because a dependent claim specifically required a “cross-member.” Analogously, in the present case, claim 1 is a means-plus-function claim, and “a light-based signal” is part of the disclosed structure. The presence of dependent claim 2 in the ‘314 patent does not change the construction of claim 1 pursuant to 35 U.S.C. §112, ¶ 6.

Finally, Versus’ use of the dictionary to define the word “based” in the element “light-based signal” runs afoul of *Phillips*, which cautions that “heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.” 415 F.3d at 1321. The reasoning of the court in *Phillips* was as follows:

The problem is that if the district court starts with the broad dictionary definition in every case and fails to fully appreciate how the specification implicitly limits that definition, the error will systematically cause the construction of the claim to be unduly expansive. The risk of systematic over breadth is greatly reduced if the court instead focuses at the outset on how the patentee used the claim term in the claims, specification, and prosecution history, rather than starting with a broad definition and whittling it down.

Id.

When placed in the context of the intrinsic and extrinsic record, it is apparent that “light-based signal” means a signal transmitted by means of IR radiation.

2. “Representative of” (Claims 1, 9)

Versus argues incorrectly that the words “representative of” in the limitation, “a light-based signal representative of an identifying code unique to that transmitter” should be construed to mean “associated with,” and bases this argument on other usage of the term “associated with” elsewhere in the claims (claim 6). This argument is incorrect for several reasons.

First, as a matter of ordinary English, “representative of” does not mean “associated with.” The adjective “representative” means “representing or capable of representing, depicting or portraying.” *Webster’s II New Riverside University Dictionary* (1988). The adjective “associated” means “united with another or others and having equal or nearly equal status,” and the verb “associate” means “to unite in a relationship; to connect or join together.” *Id.* Clearly, “representative” and “associate” are not synonyms: something can be “representative” of something else without being “associated” with it. The fact that two things are “associated” does not mean that one is “representative” of the other.

Versus refers to the usage in the claims of “representative of” and “associated with” but those references do not establish that the two terms are synonyms.

More importantly, Versus completely misses the point of claim construction by neglecting the context of the intrinsic record and the inventor’s testimony and focusing on abstract definitions. The intrinsic record, particularly the specification, discloses numerous times that the IR signals emitted from the transmitters include a unique binary number identification. (See, e.g., col. 3, ln. 66-col. 4, ln. 2). Each transmitter has its own unique code, and the code is transmitted “via infrared radiation to the receiver.” The context of the intrinsic record would thus make it clear to one of ordinary skill that the claimed invention is for the use of an infrared (“light-based”) signal that contains a unique identifying code. Radianse’s proposed definition of “representative of” as meaning “containing” accurately describes the way the term

“representative of” would be understood by one of ordinary skill in the context of the intrinsic record. The inventor, Wayne Duncan, testified that “representative of an identifying code unique to that transmitter” would be “the binary code stored in the transmitter.” (Duncan Dep. at 27, Reppert Declaration, Exhibit G).

3. “Transmission Means”

Versus erroneously argues that the limitation, “transmission means for transmitting a light-based signal representative of an identifying code unique to that transmitter” is not a means-plus-function clause governed by 35 U.S.C. §112, ¶ 6.

Where, as here, the claim employs the words “means for” in combination with a function, it is presumed to be a means-plus-function element to which §112, ¶ 6 applies. *Al-Site Corp. v. VSI International, Inc.*, 174 F.3d 1308, 1318 (Fed. Cir. 1999); *see, Greenberg v. Ethicon Endosurgery, Inc.*, 91 F.3d 1580, 1584 (Fed. Cir. 1996) (“[T]he use of the term “means” has come to be so closely associated with “means-plus-function” claiming that it is fair to say that the use of the term “means” (particularly as used in the phrase “means for”) generally invokes §112, ¶ 6 and that the use of a different formulation generally does not.”). That presumption is overcome if the claim element that uses the word “means” recites no function corresponding to the means, or if the claim element recites sufficient structure or material for performing the claim function. *Rodime PLC v. Seagate Technology, Inc.*, 174 F.3d 1294, 1302 (Fed. Cir. 1999).

Claim 1 of the ‘314 patent is entitled to the above-stated presumption because it employs the “means for” terminology. The presumption is not rebutted, because claim 1 recites a function corresponding to the means without reciting sufficient structure or material for performing the claimed function. Versus and Radianse agree that the claimed function is “transmitting a light-based signal representative of an identifying code unique to that transmitter.” However, Versus errs in its argument that the reference to “transmitter” imports

sufficient structure to take the claim out of §112, ¶ 6. In *Broadcast Innovation, LLC v. Echostar Communications Corp.*, 240 F. Supp. 2d 1127, 1147 (D. Colo. 2003), the court held that the recitation of “transmitter means transmitting the signal from said scrambling means” did not constitute a recitation of definite structure, in contrast to the “perforations” specified in *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996), the very case relied upon by Versus. The language “means for transmitting a light-based signal representative of an identifying code unique to that transmitter” provides no information whatsoever as to how the system actually works or how it is structured. See *Isogon Corp. v. Amdahl Corp.*, 47 F. Supp. 436, 449 (S.D.N.Y. 1998) (distinguishing *Cole* on grounds that claims that are dominated by functional description contain no recitation of structure). That is exactly the situation to which 35 U.S.C. §112, ¶ 6 is directed.

Conceding that §112, ¶ 6 may apply, Versus agrees with Radianse that the structure corresponding to the disclosed function is the structure shown in Fig. 2 of the patent and in the corresponding written description in the “Detail Description of the Preferred Embodiment.” That written description is correctly stated by Radianse in its proposed construction, and is found at col. 3, ln. 66-col. 4, ln. 55. The disclosed structure described in the patent includes: a random time variable generator 16; a timer 17; a clock oscillator 18; a counter 19; a programmable read-only-memory 20; and an infrared emitter 21.

4. “Receivers” (Claims 1, 9)

Radianse agrees with Versus that “receivers” should be construed, in light of the language of claim 1, to be an assembly containing a sensor, a converter, and a microprocessor for validating the signal.

5. Meaning of “Processor Means” (Claim 1)

Disregarding the presumption arising from the use of “means for” pleading regarding the “processor means” of claim 1, Versus again argues incorrectly that 35 U.S.C. §112, ¶ 6 does not apply. In fact, the “processor means” limitation of claim 1 is a classic “means-plus-function” element that sets forth multiple functions, but does not specify the structure that performs those functions with sufficient specificity to be of any assistance to one of ordinary skill in the art attempting to understand what the claims cover. Reference to the specification is thus necessary to provide an understanding of the patented invention.

Radianse submits that its construction properly sets forth each of the functions performed by the “processor means,” as well as the corresponding structure disclosed in the specification. The “processor means” performs three specific functions, as set forth in Radianse’s construction, namely: (1) recording electrical signals which are representative of unique identifying codes transmitted by means of IR from transmitters; (2) recording the identity of the receiver which determines that such electrical signals are representative of the unique identifying codes associated with said transmitters; and (3) determining in which areas the transmitters from which signals that were received by the receiver are located.

Versus’ proposed construction fails to identify those three functions of the “processor means.” It also fails to describe the functions of the “scanning means” and “accumulating means,” all as set forth explicitly in claim 1 and recited in Radianse’s proposed construction. Each of these “means for” clauses, all within the umbrella of the “processor means,” requires separate construction under §112, ¶ 6, as proposed by Radianse. Since the claim is silent on the structure accomplishing these functions, one of ordinary skill wishing to practice the invention must turn to the specification to gain an understanding as to what this claim means and covers.

The specific structure corresponding to the successive “means for” clauses within the scope of the “processor means” limitation is correctly set forth in Radianse’s proposed construction.

Versus errs by arguing that the “processor means” limitation of claim 1 should be construed without reference to §112, ¶ 6 to mean “a processor or collection of processors that is programmed to record, scan and accumulate data regarding received signals.” Such construction is overbroad and fails to specify the recited functions and also mis-describes the disclosed structure that performs the recited functions of this limitation. The specification discloses a data processor that is separate from the system’s central computer (CPU). (Col. 6, ln. 45-50). This data processor receives data from multiple receivers and stores it in RAM memory. (Col. 8, ln. 1-13). The function of “scanning” is done by the data processors, and information obtained therefrom is stored in the central processing unit. (Duncan Dep. at 19). Versus’ proposed construction fails adequately to describe the disclosed structure including both data processors and a separate CPU. Radianse submits that its proposed construction accurately describes the structure disclosed in the specification corresponding to each of the functions and sub-functions performed by the “processing means.”

6. “Step Of” (Claim 9)

Versus errs in its argument that claim 9 falls outside the scope of 35 U.S.C. §112, ¶ 6. While the recitation of “steps of” in claim 9 does not give rise to a presumption that 35 U.S.C. §112, ¶ 6 governs, the content of the steps recited in claim 9 requires the application of that section for purposes of claim construction.

Claim 9 is a method claim directly corresponding to claim 1 in each of its limitations. The steps of claim 9 do not contain a recitation of structure for the same reason that the corresponding “means for” elements of claim 1 lack sufficient structure. The functions of the claim 9 steps of “recording those electrical signals which are representative of said unique

identifying codes;” recording the receiver which determined that such electrical signals are representative of the unique identifying codes associated with their transmitters;” and “determining in which of said receivers said transmitters are located,” including the sub-steps of “scanning” and “accumulating,” are exactly the same functions as set forth in the corresponding elements of claim 1. The claim 9 elements likewise contain insufficient structure, thus requiring construction in a “step-plus-function” format.

O.I. Corporation v. Techmark Company, 115 F.3d 1576 (Fed. Cir. 1997), on which Versus relies, provides an example of a method claim in “step of” format that does provide sufficient structure to take it outside the scope of 35 U.S.C. §112, ¶ 6. For example, the patent involved in that case involved the “steps of (a) passing the analyte slug through a passage heated to a first temperature higher than the ambient, as the analyte slug passes from the spar vessel to the trap.” *Id.* at 1579. No such structure is recited in claim 9 in connection with any of the claimed “steps.”

B. THE ‘195 PATENT

1. “Transmitted Identifying Codes” (Claim 1)

Versus’ construction of “transmitted identifying codes” as “an identifying code transmission that is media independent” finds no support whatsoever in the intrinsic record, and indeed contradicts it. Indeed, Versus’ construction constitutes an egregious effort to broaden the claim construction specifically to cover the accused device, which uses radio frequency (RF), rather than IR transmissions containing unique identifying codes. In addition, Versus disregards the testimony of the inventor of the ‘195 patent, Alan C. Heller, that “infrared transmitters that transmit identifying codes” are “devices that transmit unique identification signals via infrared.” (Heller Dep. at 36).

Finally, and most importantly, the claims themselves make it clear that “transmitted identifying codes” are identifying codes transmitted from infrared transmitters. Thus, claim 1 claims “an object location and tracking system for tracking infrared transmitters that transmit identifying codes, comprising . . . a plurality of infrared sensors for receiving identifying codes from the infrared transmitters, said plurality of infrared sensors providing signals containing the infrared transmitted identifying codes.” This language can only mean that the identifying codes are transmitted by the infrared transmitters by means of infrared radiation.

The patent contains no support, either in its claims or in the specification, for Versus’ construction of “transmitted identifying codes” as a “transmission” that is “media independent,” where the patent is clear that the transmission is made via infrared transmitters, and is received via infrared receivers.

Finally, Versus’ desperate reference to Radianse’s license agreement is completely irrelevant to the issue of claim construction under the standards set forth in *Phillips*.

2. Unique Identifying Codes from Infrared Transmitters” (Claim 13)

As discussed immediately above regarding claim 1 of the ‘195 patent, the term “unique identifying codes from infrared transmitters” in claim 13 should be construed in light of the claim language and the specification to mean “unique identifying codes transmitted using infrared radiation.” There is no support anywhere in the ‘195 patent for Versus’ attempt to transform the clear meaning of this claim term into a “transmission that is media independent,” where the claim states on its face that the code is “from infrared transmitters.”

3. “Variable-Based Protocol” (Claim 1, 13)

Versus wrongly asserts that “variable-based protocol” is not defined in, and its meaning is not discernable from, the specification of the patent. It likewise errs by arguing that the term “variable-based protocol” has no particular technical meaning to people of ordinary skill in the

art. Claim 2 of the '195 patent is for "[t]he objection location and tracking system of claim 1, wherein the variable-based protocol that implements object identifier variables is Simple Network Management Protocol (SNMP)". The specification describes SNMP at some length. (See, col. 9, ln. 65-col. 28, ln. 17). Contrary to the assertion of Versus' expert that "variable-based protocol" has no particular technical meaning, the patent itself says that "SNMP, or Simple Network Management Protocol, is a well-known network communication protocol based on a variable paradigm." (Col. 8, ln. 65-67). The specification further identifies a publication describing SNMP and states that SNMP is "well known to the data communications art." (Col. 9, ln. 21-24).

Briefly summarized, the specification explains that, "[t]he server maintains a Management Information Base (MIB) that defines a set of conceptual variables that the SNMP server must maintain. Sometimes these are actual variables, other times they are parameters generated by performing various functions or, in the disclosed embodiment, received from a controller or collector." (Col. 9, ln. 4-9). The specification explains that MIB variables are constructed under a naming convention under which each sub-level of the variable is separated by periods and standard additional prefixes are also used. (Col. 9, ln. 10-20). It goes on to explain that "SNMP uses a variable paradigm, and its messages provide for getting and sending variables of the system using object identifiers (OIDs). To provide for a uniform interface to the network, the objects in the sub-network in the disclosed embodiment are identified through sub-network object identifiers (SNOIDs). These SNOIDs are accessed using standard SNMP protocol." (Col. 9, ln. 28-34).

The specification explains that "an SNMP server manages a block of variables (MIB) whose values clients can access using Get and Set. Variables within the server are addressed via

Object Identifiers (OIDs). An OID is represented as a sequence of decimal numbers separated by decimal points. The variable length data that is Get and Set is encoding using ASN.1, a standard encoding format, and can be of several different types.” (Col. 9, ln. 50-58). It further explains: “SNOIDs are used to communicate with the sub-network, making SNOIDs the sub-network’s ‘language.’ All system variables of the sub-network have been given unique OIDs. This a very rich set of variables that includes such items as ASCII names for every component within the sub-network as well as firmware revision levels.” (Col. 10, ln. 20-29). The specification goes on to explain the use of unique registered serial numbers (RSN).

The SNOIDs used in the preferred embodiment of the patent are explained. (Col. 11, ln. 30-col. 12, ln. 13). This portion of the specification explains the sequence of information contained in an object identifier, starting with resource class, followed by variable number, followed by index, followed by sequence number. The specification explains that “each sub-network resource supports variables in three groups. Variables O, 1, 2 and 3 are fundamental to all devices and are supported even when the loadable firmware is not functional. Variables 5 through 13 are largely universal among resources. Variables above 13 are resource specific. Columns 12 through 15 of the patent describe the different variables and their functions.” Additional information regarding the functioning of a variable paradigm system is set forth at columns 15 through 23 in specific detail.

On the basis of the foregoing, it is apparent that a “variable-based program,” such as SNMP, has a specific technical meaning. A “variable-based protocol” as disclosed uses variables to provide information about the network being managed, allowing for an expandable, open-ended format for providing data. A management information base (MIB) is established for the specific system being monitored. Variables are assigned for the information to be

communicated. When the information is to be communicated, the assigned variable representing that variable is used. If additional information needs to be conveyed, the MIB is updated so new variables are assigned for the additional information. From the description in the specification of the variables, it is clear that, in a variable-based protocol, signals sent using the protocol vary in content and length depending upon the information being conveyed.

Versus' proposed construction, *i.e.*, "a protocol which conveys variables" is incorrect. Where, as here, the inventor has acted as his own lexicographer and provided a detailed and specific definition of the meaning of the term in question, that definition must be employed in construing the claim.

4. "Object Identifier Variables" (Claims 1, 13, 16)

Again, Versus disregards the definition provided in the specification. While Versus quotes the "Summary of the Invention," it fails to refer to the detailed description of object identifier variables contained at columns 8-12 as discussed above, or the specific examples of the different variables and their functions as described in columns 12 through 15 of the patent. Those descriptions make it clear that "object identifier variables" are variables that vary in content and length based on the information being conveyed and that are used in a variable-based protocol to correspond with the objects to be tracked or located.

5. "Means for sending and receiving messages over said computer network in a variable-based protocol that implements object identifier variables." (Claim 1)

Versus wrongly argues that this "means for" clause is not a "means-plus-function" limitation. Versus misstates the limitation by arguing that "a computer connected to said network" is the structure corresponding to the claimed function of "sending and receiving messages over said computer network in a variable-based protocol that implements object identifier variables." The claim is for a "computer including" the "means for sending and

receiving...” One must thus look to the specific structure within the computer that performs the claimed function, and it tells the practitioner nothing to say that a computer is involved. In fact, the patent specifies that there must be a specific kind of server that “maintains a management information base (MIB) that defines a set of conceptual variables that the SNMP server must maintain.” (Col. 9, ln. 3–6). In the preferred embodiment, Concentrator 104 acts as the server and communicates with logger PC 100: “[T]he logger PC 100 communicates with the concentrator 104 and controls various information from the concentrator 104 [i.e., the information obtained by use of the variable-based protocol] and controls various devices based on messages received from and sent to the concentrator 104.” (Col. 3, ln. 31–39). This is the disclosed structure performing the claimed function.

C. THE ‘791 PATENT

1. “Area-Detection,” “Assigned Areas,” and “Assigned Areas of a Predetermined Size” (Claims 39, 48, 66)

The terms “area-detection” and “assigned areas” appear in the preambles of independent claims 1 and 66. By the inclusion of these terms, both preambles constitute limitations of their respective claims. The terms “area-detection” and “assigned areas” are defined terms in the patent that “recite essential structure” and are “necessary to give life, meaning and vitality to the claim.” *See Seachange Intern., Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1375–76 (Fed. Cir. 2005) (citing cases); *Poly-America, L.P. v. GSE Lining Technology, Inc.*, 383 F.3d 1303, 1309–10 (Fed. Cir. 2004) (“when reciting additional structure or steps underscored as important by the specification, the preamble may operate as a claim limitation.” (citing cases)). Relevant portions of the specification are cited in the “Support for Proposed Construction” column of Radianse’s opening brief.

In addition, the preambles of claims 1 and 6 constitute limitations because the applicant relied on them during prosecution. In his Response to the First Office Action (Reppert Affidavit, Exhibit E, at 9), the applicant distinguished the cited prior art with an argument that the “area-detection embodiment . . . includes an array of receivers distributed within a tracking area, (a) with each receiver being configured to receive TAG transmissions from an assigned area, and (b) with TAG location being determined based on the identity of the receiver receiving a TAG transmission.” As the Federal Circuit held in *Intertool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1295 (Fed. Cir. 2004), a preamble is a claim limitation if there is “clear reliance on the preamble, rather than on the structural limitations set forth in the body of the claim,” during patent prosecution. That is the case here.

In its proposed construction of “area-detection,” “assigned areas,” and “assigned area of a predetermined size,” Versus disregards the context of the intrinsic record as well as the testimony of the inventor. Its first argument, that “area-detection” and “assigned areas” do not require construction, flies in the face of the specific definitions of those terms in the specification. The specification describes two embodiments: the preferred high resolution embodiment employing time-of-arrival, and a low cost embodiment employing “area detection.” The specification clearly states that “area detection” is a low cost alternative to the high resolution embodiment. As stated in the Summary of the Invention:

The invention is a location system adapted for use in environments subject to multipath effects, implementing object location by (a) time-of-arrival differentiation using tag transmissions received at multiple receivers (high resolution embodiment), or (b) *area-detection* using receivers that receive tag transmissions from an *assigned area* (low detection embodiment).

(Col. 1, ln. 62 – col. 2, ln. 1; *see also*, col. 11, ln. 10-25). Clearly, the inventor intended special and specific meanings for “area detection” and “assigned areas,” and the Court should adopt the inventor’s lexicography.

In the “area detection” embodiment, the receivers are situated so that only one receiver will receive a transmission from a TAG. The system determines what receiver received the TAG transmission, and concludes that the TAG must be within the reception area of that receiver: “Receivers only receive TAG transmissions from TAGs transmitting within assigned areas, so that object location is effected when a receiver receives a TAG transmission with the TAG ID.” (Col. 11, ln. 23-25). For this to occur, the reception areas of the respective receivers should not overlap, because in that event a TAG transmission could be received by more than one receiver, resulting in “a loss of object location resolution.” (Col. 11, ln. 43-48). An “assigned area” is thus an area around a receiver configured such that the signal from an object within that area is received by only one receiver. “Area detection” is a location system using receivers configured to detect TAG transmissions only from non-overlapping areas, so that signals from an object will be received by only one receiver.

Versus’ construction of “assigned areas”¹ improperly defines that term by reference to the limits of system accuracy rather than the intended configuration in which “receivers [are] configured to receive TAG transmissions only from respective assigned areas.” Versus’ construction of “area-detection”² likewise fails to capture that essential feature as stated in the specification.

¹ “Assigned areas” means “each receiver of the array is assigned to a specific location-area, such that it receives TAG transmissions almost exclusively from TAGs located in that area.” (Versus Br. At 16).

² “using receivers that receive radiolocation transmissions from assigned areas.” (Versus Br. at 16).

Likewise, Versus' proposed construction of "assigned area of a predetermined size"³ omits the essential feature of the patented invention that only one receiver receives the transmission from a TAG. This feature was emphasized by the applicant in overcoming a rejection by examiner regarding the limitation, "being configured to receive TAG transmissions from an assigned area of predetermined size." (Reppert Declaration, Exhibit F, at 8). The applicant successfully argued that, "[i]f all receivers received transmissions from the same broad area (as could occur in certain types of radio-location systems) the limitation could not be met." In its response to another office action, the applicant distinguished the cited Hiraiwa prior art with the argument that it "assumes that radiolocation signals transmitted from an object will be received by more than one receiver" In contrast, the applicant argued that his invention teaches "a radiolocation technique based on an array of receivers each with an assigned area of reception in which position information is based on the identity of a receiver receiving such transmission." (Reppert Declaration, Exhibit E, at 9)

Versus wrongly argues that "nothing in the patent or prosecution history suggests that two or more receivers cannot be assigned to the same area to enhance detection ability within that area." This argument contradicts the essential teaching of the patent that each receiver has its own separate assigned area. The portion of the specification quoted by Versus ("In this case, selecting receiver location is flexible, subject to providing coverage for an assigned object-location area,") (col. 11, ln.37-38) actually concerns an example of "object-location areas of a predetermined size" in which "directional antennas could be used at selected receiver locations, with the size of the object-location area being determined by the predetermined antenna beam width." (Col. 11, ln. 29-33). This passage solely concerns the concept of one receiver per area,

³ "an area that is predetermined based on the detection range of the receiver." (Versus Br. at 17).

and merely provides an example of how an area could be selected based on the receiver's beam width. It provides no support for Versus' preposterous argument that the patent discloses the assignment of two receivers to cover the same area. The specification and file history are exactly to the contrary. If a TAG transmission is received by two receivers (receivers A and B) in the area-detection embodiment, the accuracy of location is degraded, because the system cannot determine if the receiver is in Area A, around Receiver A, or in Area B, around Receiver B. The disclosed invention avoids that problem by requiring that the reception areas around the respective receivers do not overlap.

Finally, Versus disregards the testimony of Alan Heller, the inventor of the '791 patent. In his deposition, Mr. Heller testified that the "area" around a receiver is "assigned" so that the signal from the object is received by only a single receiver. (Heller Dep. at 54, Reppert Affidavit, Exhibit H).

D. '139 PATENT

1. "Including" (Claims 1, 5)

Versus' argument that "including" means "associated with" is nothing more than linguistic sophistry that deliberately disregards the intrinsic record and seeks improperly to ensnare the accused Radianse system.

As a matter of ordinary English, "include" means "contain." See, *Webster's II New Riverside Dictionary* (1988) ("**include**: 1. to have or take in as a part or member: CONTAIN"). Likewise, "associate" has a different meaning from "include" *Id.* ("**associate**: 1. to unite in a relationship. 2. to connect together: LINK").

More importantly, the context of the intrinsic record makes it clear that "a substantially line-of-sight signal including a unique TAG ID" means such a signal containing a unique TAG ID. The specification states that "each badge emits a hemisphere of digitally encoded infrared

(i.e. IR) light as indicated by lines 14. Preferably, the digitally encoded infrared light includes a 42 bit packed having a fixed 16 bit ID plus other network information.” (Col. 5, ln. 52-58).

None of the references cited by Versus stands for the proposition that the IR signal need not contain the unique TAG ID, or that the limitation would be met by the mere “association” of the IR signal with a different signal that had contained the unique TAG ID. Transparently, Versus is attempting to obtain a construction that would cover the Radianse system, that uses RF but not IR to send the unique TAG ID. It should not be permitted to succeed in thus distorting the patented invention.

The context of the intrinsic record further requires the construction sought by Radianse, because it requires there be separate IR and RF signals from the transmitters, each of which must “include” the unique TAG ID:

For each subject, providing a TAG capable of transmitting a substantially line-of-sight signal including a unique TAG ID substantially simultaneously with a substantially non-line-of-sight signal also including the unique TAG ID.

(‘139 patent, claim 1). The mere “association” of an IR signal that did not contain the unique ID with an RF signal that did contain the unique ID would not be covered by this claim.

Versus again tries to confuse the issue by arguing that “include” does not mean “physical attachment.” However, Versus’ citation is to a concurring opinion in a case in which the discussion of “including” was directed solely to the specific embodiment claimed in that case, involving a blower with a non-attached ring and clearly of no relevance here. *See Toro Co. v. White Consol. Industries, Inc.*, 199 F.3d 1295, 1303 (Fed. Cir. 1999). In any event, Versus’ argument is beside the point, because Radianse proposes that “including” be construed to mean “containing,” not “physically attached to.” Likewise, Versus’ makes a misleading argument that the “media type” (i.e., IR vs. RF signals) containing unique ID is unimportant. The language

quoted by Versus actually states that the “relevant information” is “that the signal came from RF or IR.” This is indeed the gist of the patented invention, because IR signals (that do not go through opaque walls) provide more precise location information, and RF signals (that do go through opaque walls) provide less precise location when IR signals are blocked.

2. “Substantially Simultaneously” (Claims 1, 5)

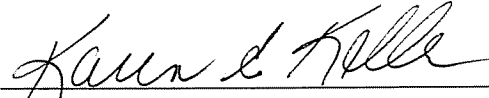
Alan Heller, inventor of the ‘139 patent, testified that “substantially simultaneously” means “done at the same time.” (Heller Dep. at 161, Reppert Affidavit, Exhibit H). The Court should adopt Mr. Heller’s definition. The portion of the file history quoted by Versus supports this construction. It states that, “a single microprocessor of a TAG modulates different signals simultaneously or staggered. In other words, the TAG is capable of transmitting a substantially line-of-sight signal including a unique TAG ID substantially simultaneously with a substantially non-line-of-sight signal also including a unique TAG ID.” This wording must be interpreted to mean that when the TAG is modulating “simultaneously” it is transmitting “substantially simultaneously,” which is what is claimed. A “staggered” transmission would not be a “simultaneous” one. “Substantially simultaneously” must mean “done at the same time,” as the inventor testified.

3. **“Substantially Line-of-Sight Signal”; “Substantially Non-Line-of Sight Signal”; “Extended Area Receiver”; “Limited Area Receiver”; “In Response To”**

Versus has no comment regarding each of these terms, and apparently does not dispute Radianse’s proposed construction of them.

Respectfully submitted,

RADIANCE, INC.



Josy W. Ingersoll (#1088)
Christian Douglas Wright (#3554)
Karen E. Keller (#4489)
YOUNG CONAWAY STARGATT &
TAYLOR, LLP
The Brandywine Building
1000 West Street, 17th Floor
P. O. Box 391
Wilmington, Delaware 19899-0391
(302) 571-6672

OF COUNSEL:

Sibley P. Reppert
William A. Scofield, Jr.
LAHIVE & COCKFIELD
28 State Street
Boston, MA 02109-1784
(617) 227-7400

Dated: November 18, 2005

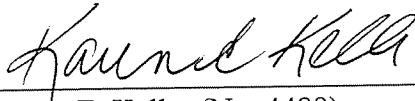
CERTIFICATE OF SERVICE

I, Karen E. Keller, Esquire, hereby certify that on November 18, 2005, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

George Pazuniak , Esquire
Connolly Bove Lodge & Hutz LLP
The Nemours Building
1007 North Orange Street
PO Box 2207
Wilmington, DE 19899

I further certify that copies of the foregoing document were served by hand delivery on the above-listed counsel of record.

YOUNG CONAWAY STARGATT & TAYLOR, LLP



Karen E. Keller (No. 4489)
The Brandywine Building
1000 West Street, 17th Floor
Wilmington, Delaware 19801
(302) 571-6600
kkeller@ycst.com

Attorneys for Radianse, Inc.